



## CONTENTS OF VOLUME 132

Vol. 132C, No. 1

### Review article

**H. Menezes and C. Jared**

1 Immunity in plants and animals: common ends through different means using similar tools

### General papers

**A.K. Singh**

9 Acute effects of acephate and methamidophos and interleukin-1 on corticotropin-releasing factor (CRF) synthesis in and release from the hypothalamus in vitro

**F.Y. Radwan, H.M. Aboul-Dahab and J.W. Burnett**

25 Some toxicological characteristics of three venomous soft corals from the Red Sea

**B.E. Engelmann, N. Bindslev, S.S. Poulsen and M.B. Hansen**

37 Effects of cyclooxygenase and lipoxygenase inhibition on basal- and serotonin-induced ion transport in rat colon

**A.-J. Pettersen, R.A. Andersen and K.E. Zachariassen**

53 Effects of dietary intake of trace metals on tissue contents of sodium and calcium in mice (*Mus musculus*)

**T. Kamenosono, H. Shimada, T. Funakoshi, S. Kojima and Y. Imamura**

61 Structure-effect relationship in the mobilization of cadmium in mice by several dithiocarbamates

**R. Käkelä, I. Jokinen, A. Käkelä and H. Hyvärinen**

67 Effects of gender, diet, exogenous melatonin and subchronic PCB exposure on plasma immunoglobulin G in mink

**M. Riffeser and B. Hock**

75 Vitellogenin levels in mussel hemolymph—a suitable biomarker for the exposure to estrogens?

**J. Forget, S. Livet and F. Leboulenger**

85 Partial purification and characterization of acetylcholinesterase (AChE) from the estuarine copepod *Eurytemora affinis* (Poppe)

**M.-L. Vidal, A. Bassères and J.-F. Narbonne**

93 Influence of temperature, pH, oxygenation, water-type and substrate on biomarker responses in the freshwater clam *Corbicula fluminea* (Müller)

**D. Stone, P. Jepson and R. Laskowski**

105 Trends in detoxification enzymes and heavy metal accumulation in ground beetles (Coleoptera: Carabidae) inhabiting a gradient of pollution

**Q.-X. Meng, W.-Y. Wang, Q.-M. Lu, Y. Jin, J.-F. Wei, S.-W. Zhu and Y.-L. Xiong**

113 A novel short neurotoxin, cobrotoxin c, from monocellate cobra (*Naja kaouthia*) venom: isolation and purification, primary and secondary structure determination, and tertiary structure modeling

I Instructions to Authors

Vol. 132C, No. 2

### General papers

**M.A. Mansour, A.M. Mostafa, M.N. Nagi, M.M. Khattab and O.A. Al-Shabanah**

123 Protective effect of aminoguanidine against nephrotoxicity induced by cisplatin in normal rats

**B.J. Stanton, S.M. Watkins, J.B. German and B.L. Lasley**

129 Effect of estrogen and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on plasma fatty acids of immature male chickens (*Gallus domesticus*)

**M. Floreani, E. Napoli and P. Palatini**

143 Role of antioxidant defences in the species-specific response of isolated atria to menadione

**F.Y. Al-Balool**

153 Functional activities of the colon of the desert gerbil (*Gerbillus cheesmani*)

**K. Nishi, M. Chikae, Y. Hatano, H. Mizukami, M. Yamashita, R. Sakakibara and E. Tamiya**

161 Development and application of a monoclonal antibody-based sandwich ELISA for quantification of Japanese medaka (*Oryzias latipes*) vitellogenin

Contents of volume

- G. Guerra-Rivas, C.M. Gómez-Gutiérrez and F.J. Márquez-Rocha** 171 Effect of polycyclic aromatic hydrocarbons on the pallial fluid buffering capacity of the marine mussel, *Mytilus galloprovincialis*
- R.E. Tilley, G.D. Kemp, I. Teramitsu and A.J. Hall** 181 Isolation of two cytochrome P450 cDNAs, CYP1A1 and CYP1A2, from harp seal (*Phoca groenlandica*) and grey seal (*Halichoerus grypus*)
- P.J. Klein, T.R. Van Vleet, J.O. Hall and R.A. Coulombe, Jr** 193 Biochemical factors underlying the age-related sensitivity of turkeys to aflatoxin B<sub>1</sub>
- L. Zhang, I.A. Khan and C.M. Foran** 203 Characterization of the estrogenic response to genistein in Japanese medaka (*Oryzias latipes*)
- I. Pajic, Z. Kljajic, N. Dogovic, D. Sladic, Z. Juranic and M.J. Gasic** 213 A novel lectin from the sponge *Haliclona cratera*: isolation, characterization and biological activity
- A.N. Boone and M.M. Vijayan** 223 Constitutive heat shock protein 70 (HSC70) expression in rainbow trout hepatocytes: effect of heat shock and heavy metal exposure
- E.H. Jørgensen, M.M. Vijayan, N. Aluru and A.G. Maule** 235 Fasting modifies Aroclor 1254 impact on plasma cortisol, glucose and lactate responses to a handling disturbance in Arctic charr
- J.J. Leaner and R.P. Mason** 247 Methylmercury accumulation and fluxes across the intestine of channel catfish, *Ictalurus punctatus*
- H.X. Wang and T.B. Ng** 261 Demonstration of antifungal and anti-human immunodeficiency virus reverse transcriptase activities of 6-methoxy-2-benzoxazolinone and antibacterial activity of the pineal indole5-methoxyindole-3-acetic acid
- I Instructions to Authors

Vol. 132C, No. 3

***Review articles***

- S.J. Clearwater, A.M. Farag and J.S. Meyer** 269 Bioavailability and toxicity of dietborne copper and zinc to fish
- A.M.S. Mayer and M.T. Hamann** 315 Marine pharmacology in 1999: compounds with antibacterial, anticoagulant, antifungal, anthelmintic, anti-inflammatory, antiplatelet, antiprotozoal and antiviral activities affecting the cardiovascular, endocrine, immune and nervous systems, and other miscellaneous mechanisms of action

***General papers***

- H.S. Al-Salmy** 341 Inter-strain variability in aldehyde oxidase activity in the mouse
- K. Ghebremeskel, D. Bitsanis, E. Koukkou, C. Lowy, L. Poston and M.A. Crawford** 349 Liver triacylglycerols and free fatty acids in streptozotocin-induced diabetic rats have atypical n-6 and n-3 pattern
- A. Anandraj, D.J. Marshall, M.A. Gregory and T.P. McClurg** 355 Metal accumulation, filtration and O<sub>2</sub> uptake rates in the mussel *Perna perna* (Mollusca: Bivalvia) exposed to Hg<sup>2+</sup>, Cu<sup>2+</sup> and Zn<sup>2+</sup>
- A.J. García-Fernández, A.E. Bayoumi, Y. Pérez-Pertejo, M. Motas, R.M. Reguera, C. Ordóñez, R. Balaña-Fouce and D. Ordóñez** 365 Alterations of the glutathione-redox balance induced by metals in CHO-K1 cells
- A. Ishrath, N. Kumar and C.S. Dey** 375 Differential activation of ERK and JNK by arsenite in mouse muscle cells
- F. Silvestre, G. Trausch, L. Spanò and P. Devos** 385 Effects of atrazine on osmoregulation in the Chinese mitten crab, *Eriocheir sinensis*
- A. Mustafa, A.M. Gado, O.A. Al-Shabanah and A.M. Al-Bekairi** 391 Protective effect of aminoguanidine against paraquat-induced oxidative stress in the lung of mice
- M. Orellana, J. Araya, V. Guajardo and R. Rodrigo** 399 Modulation of cytochrome P450 activity in the kidney of rats following long-term red wine exposure
- I Instructions to Authors

**General papers**

- H. Watanuki, T. Yamaguchi and M. Sakai** 407 Suppression in function of phagocytic cells in common carp *Cyprinus carpio* L. injected with estradiol, progesterone or 11-ketotestosterone
- D. Kim, T. Oda, T. Muramatsu, D. Kim, Y. Matsuyama and T. Honjo** 415 Possible factors responsible for the toxicity of *Cochlodinium polykrikoides*, a red tide phytoplankton
- Tugiyono and M.M. Gagnon** 425 Metabolic disturbances in fish exposed to sodium pentachlorophenate (NaPCP) and 3,3',4,4',5-pentachlorobiphenyl (PCB126), individually or combined
- T. Yamamoto, T. Ohkuwa, H. Itoh, Y. Sato and M. Naoi** 437 Effect of gender differences and voluntary exercise on antioxidant capacity in rats
- Z.A. Damanhour** 445 Mixed function oxidases in kidney and duodenum of camel, guinea pig and rat
- N. Ohuchi, K. Koike, M. Sano, T. Kusama, Y. Kizawa, K. Hayashi, Y. Taniguchi, M. Ohsawa, K. Iwamoto and H. Murakami** 451 Proliferative effects of angiotensin II and endothelin-1 on guinea pig gingival fibroblast cells in culture
- S. Mondal and U. Rai** 461 Dose and time-related in vitro effects of glucocorticoid on phagocytosis and nitrite release by splenic macrophages of wall lizard *Hemidactylus flaviviridis*
- D.C. Masui, R.P.M. Furriel, J.C. McNamara, F.L.M. Mantelatto and F.A. Leone** 471 Modulation by ammonium ions of gill microsomal ( $\text{Na}^+, \text{K}^+$ )-ATPase in the swimming crab *Callinectes danae*: a possible mechanism for regulation of ammonia excretion
- T. Verslycke, G.F. Vandenberghe, B. Versonnen, K. Arijs and C.R. Janssen** 483 Induction of vitellogenesis in 17 $\alpha$ -ethynestradiol-exposed rainbow trout (*Oncorhynchus mykiss*): a method comparison
- H. Shingu, K. Hodate, S. Kushibiki, Y. Ueda, A. Watanabe, M. Shinoda and M. Matsumoto** 493 Breed differences in growth hormone and insulin secretion between lactating Japanese Black cows (beef type) and Holstein cows (dairy type)
- I      Contents of Volume 132
- IV     Subject Index
- VII    Author Index
- IX    Instructions to Authors